Remarks/Arguments:

Claims 1-15 are presented for examination. Claims 16-28 are tentatively withdrawn pending resolution of applicant's traverse to the recent election/restriction requirement.

Amendments to the Specification – paragraphs [0091] and [0098] are amended to correct minor typographical errors, wording, and punctuation, without substantive change.

Reply to Office Action; Rejection under 35 USC 102 –

Claims 1, 3-4 and 8 are rejected as anticipated by Courtney (WO 97/25551). Courtney teaches the use of resilient, single cell capsules in a mass of liquid, grease or jelly (hereinafter the "liquid"). The capsules and liquid are enclosed in a moveable walled vessel or bladder. The capsules are filled with a gas. In some embodiments, the capsules are sealed against entry of liquid. In other embodiments, the capsules are apertured to allow direct communication with the liquid. Much of Courtney's description is directed to shapes of tubes, nozzles, and flares (hereinafter "tubes") forming an aperture wall.

The teachings of Courtney do not disclose applicant's claimed invention. Further, under the factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1 (1966), the claims are non-obvious. In three important ways, the direction of teaching in Courtney is opposed to applicant's invention.

First, Courtney never discloses a porous body of elastic foam. A dictionary definition of "porous" is "having or full or pores." The definitional use of the plural, "pores," is indicative or Courtney's limitation, where the individual capsules have, at best, a single aperture. Applicant employs the term "porous" in conformity with the accepted definition: at paragraph [0045] applicant states, "The porous body defines a network of cells interconnected through cell orifices suitably configured for passing viscous liquid between cells."

The difference is more than semantic. Courtney's failure to use a porous body provides a teaching away from applicant's invention. Courtney's use of single, non-porous capsules causes problems that might have been solved by use of a porous body; but Courtney never teaches in the direction of using such body of foam. In a specific example at page 9, line 4, Courtney reveals the problem of loose capsules that "clump" within the bladder. Rather than use a porous body to solve the problem, Courtney partitions the bladder. This example is particularly revealing, as it shows that Courtney distinctly teaches that the individual capsules are to be isolated from one another, which is quite opposite from a porous body. In another example at page 14, line 1, Courtney reveals the problem that the separate, individual capsules can clog valves. Rather than use a porous body, Courtney adopts mesh grills to hold the capsules away from the valves. Facing the same problem at page 14, line 10, Courtney adopts flap valves with soft faces so that

the valves do not damage the loose, individual capsules. These examples confirm the limited scope and content of Courtney's teachings, which are opposed to a key feature of applicant's invention and claims.

Claim 1 specifically distinguishes from Courtney on this point, at line 4 defining the element: "a porous body of elastic material . . .." Courtney teaches no porous body.

Second, Courtney never teaches the use of open cell foam. Applicant's paragraph [0075], line 7, defines this important feature: "The vast majority of these cells have at least one aperture through which the viscous liquid can enter or exit the cell and *flow from one cell to a juxtaposed cell.*" (Emphasis added) Specifically at line 3, "Each MEDE consists of numerous interconnected cells . . .." Courtney never discloses and never teaches in the direction of an individual open capsule communicating with other similar capsules in a network. The open capsules are not interconnected. In contrast, applicant teaches the use of open cell elastic foam that receives and passes viscous liquid to other cells. Consequently, applicant's claimed invention is distinguished from Courtney by the use of numerous or plural interconnected cells of an open cell foam.

Claim 1 specifically distinguishes from Courtney on this point, at line 6 stating: " . . . said body defines a network of cells interconnected through cell orifices suitably configured for passing viscous liquid between cells." Clearly, Courtney never teaches any suitable network of cells . . . configured for passing viscous liquid between cells.

Third, applicant employs the passing of liquid through the cells as a key feature. Courtney adamantly teaches against allowing the liquid to enter the capsule, itself. The Courtney specification at page 6, line 13, states, "One disadvantage of this design is that if the impact forces are large then the medium will overshoot the end of the tube and be retained inside the capsule." Courtney ultimately implies that the capsule would become nonfunctional if the liquid enters the capsule. This follows from Courtney specification at page 11, line 24, discussing a benefit of nesting small, *sealed,* gas-filled spheres inside larger, apertured capsules: "The advantage of this nested design is that even if after prolonged use the inner walls of the larger capsules become contaminated by being permanently coated with the medium the device *would still offer a useful degree* of shock-absorbing benefits." (Emphasis added) The clear implication of this disclosure is that, absent the small nested capsule, the larger capsule would become non-useful or nonfunctional at the point where applicant's invention becomes useful and functional. Applicant's claimed invention favors and relies upon the viscous liquid entering the cells of the open cell foam. Not only does the viscous liquid enter the cells, but this is a desired feature described at paragraph [0075], line 6, " . . . many of the cells house a pocket of viscous liquid."

Claim 1 specifically distinguishes from Courtney on this point, at line 7 stating: "a viscous liquid contained within said envelope and filling at least a portion of said network of

interconnected cells." Courtney both lacks the network and teaches in direct opposition to filling a network with viscous liquid.

For the reasons shown, Courtney is not a 35 U.S.C. 102 anticipation of applicant's claim 1. Applicant's structure and function are distinctly different. These differences now have been pointed out and are distinctly claimed.

Neither does Courtney make obvious under 35 U.S.C. 103 the distinct differences pointed out, above. The scope of Courtney's apparatus and method is limited to isolated, single capsules that are designed and intended to never contain viscous liquid. Courtney's teaches in the direction of non-utility, a statutory defect under 35 U.S.C. 101, if Courtney's invention were modified in the direction of applicant's invention.

Further evidence of non-obviousness is applicant's new or improved result in providing satisfactory protection against high G-shock, which is an important current problem. At paragraph [0100], the specification provides test data confirming a solution to this problem.

Commercial success is a further indication of non-obviousness. Applicant's MEDEs are in commercial use and sale. The leading Internet hardware review site, Tom's Hardware Guide (http://www.tomshardware.com) reviewed the Olixir Mobile Data Vault that employs MEDEs. The Appendix is a two-page exhibit that shows two selected pages from the February 2004 review, showing the use of the claimed invention in a ruggedized external hard disc drive. (http://www.tomshardware.com/storage/20040213/olixir-03.html) This showing of commercial success completes a showing of non-obviousness under the criteria of *Graham v. John Deere.*

In light of the above, applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

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Appl. No. 10/604,388
Amendment dated June 30, 2005
Reply to Office Action of March 30, 2005
Exhibit

tom's hardware guide

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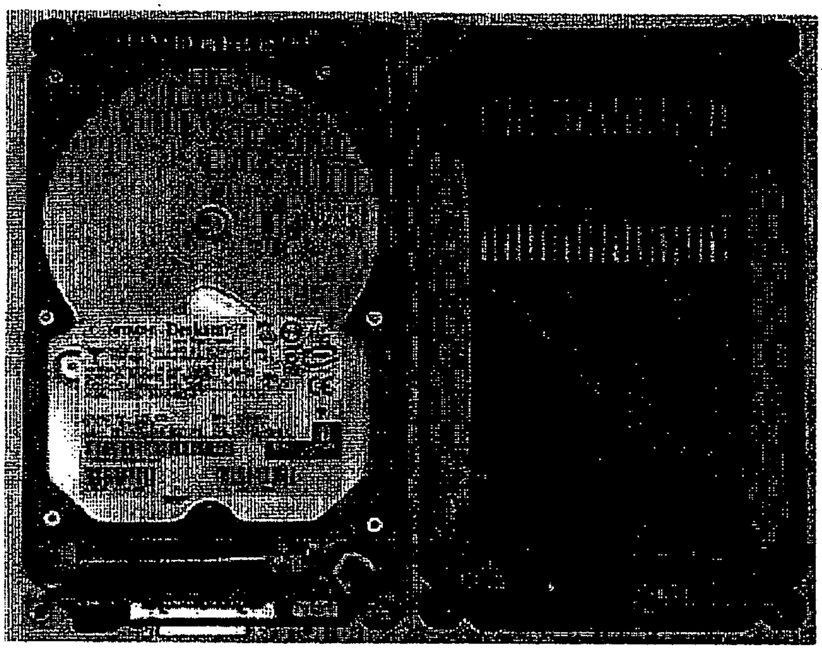

You've seen it before: Hitachi's DeskStar 120 GXP. The Olixir website does not offer detailed information on the hard drives used except the two manufacturers Hitachi and Maxtor.

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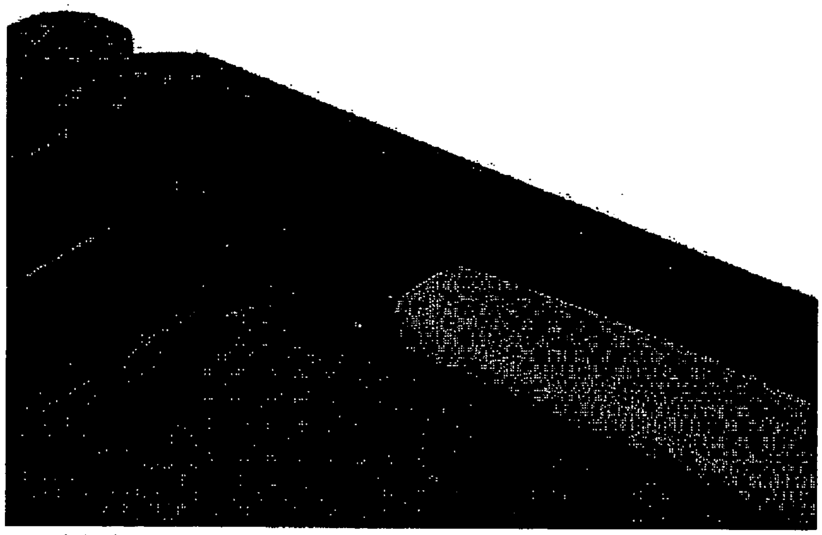

... and the bottom as well.